ThinkSystem SR670
Delivering Artificial Intelligence at scale

Accelerating Artificial Intelligence

The Lenovo ThinkSystem SR670 delivers optimal performance for Artificial Intelligence (AI) and high-performance computing (HPC) workloads while maintaining a low total cost of ownership (TCO).

The SR670 allows up to either four double-width or eight single-width GPUs per 2U node, and is suited for computationally intensive workload requirements for Machine Learning (ML), Deep Learning (DL), or Inference.

Built on two second-generation Intel® Xeon® Scalable Processors and designed to support high-end GPUs including NVIDIA Tesla V100 or T4, the ThinkSystem SR670 delivers optimized performance for AI training and accelerated HPC workloads. Capabilities include:

- Up to four full-height, full-length double-wide, or eight half-height, half-length, single-wide GPUs in a 2U form factor
- Up to eight 2.5-inch SATA HDDs/SSDs and M.2 boot SSDs for storage flexibility
- Support for Mellanox EDR IB, Intel OPA, Intel 2x 10GbE, and Intel 2x 1GbE networking
- Enabled for Lenovo intelligent Computing Orchestration (LiCO) HPC/AI management software

Maximum Performance

As more workloads leverage the performance of accelerators, the demand for GPU density increases. Industries such as retail, financial services, energy, and healthcare are leveraging GPUs to extract greater insights and drive innovation utilizing ML, DL, and Inference techniques.

The ThinkSystem SR670 provides an optimized enterprise-grade solution for deploying accelerated HPC and AI workloads in production, maximizing system performance while maintaining data center density.

Solutions That Scale

Whether you're just starting with AI or moving into production, your solution must scale with your organization's needs.

The ThinkSystem SR670 can be used in a cluster environment using high-speed fabric/networking to scale out as your workload demands increase. And, with LiCO, you can support multiple users and scaling within a single cluster environment.

LiCO is a powerful platform that manages cluster resources for HPC and AI applications. LiCO provides workflows for both AI and HPC, and supports multiple AI frameworks, including TensorFlow, Caffe, Neon, and MXNet, allowing you to leverage a single cluster for diverse workload requirements.

ThinkSystem

Lenovo™

intel® XEON® PLATINUM inside™

Getting started is easy with the Lenovo AI Innovation Centers, where you can test your own PoC on different hardware and software platforms, including the SR670 with Lenovo data scientists and AI solution architects available to help you along the way.

Lenovo can work with you to develop an end-to-end solution for your unique use case with professional services and deep industry partnerships to ensure your success.

Data Center Reliability Leader

At Lenovo, we take a customer-centric approach, which is why ThinkSystem servers consistently rank #1 in reliability[†] and #1 in customer satisfaction[‡]. Also, Lenovo is the leading provider of supercomputers in the TOP500. Lenovo is trusted by 17 of the world's top 25 research universities to provide scalable, high-performance solutions. The ThinkSystem SR670 provides the latest in performance and reliability in a scalable solution for enterprise and research.

Specifications

Form Factor	Full-width 2U enclosure
Processors	2x second-generation Intel® Xeon® Scalable Processors (up to 205W) per node
Memory	Up to 768GB using 24x 2933MHz TruDDR4 DIMMs per node
I/O Expansion	Up to 3 PCIe adapters: 2x PCIe 3.0 x16 + 1x PCIe 3.0 x4 slots
Acceleration	Up to 4 double-wide, full-height, full-length GPUs (each PCIe 3.0 x16 slots), or up to 8 single-wide, full-height, half-length GPUs (each PCIe 3.0 x8 slots)
Management Network Interface	1x RJ-45 for dedicated 1GbE system management
Internal Storage	Up to 8x 2.5" hot-swap SSD or HDD SATA drives in rear bays Up to 2x non-hot-swap M.2 SSDs, 6Gbps SATA in internal bays
RAID Support	SW RAID standard; optional HBA or HW RAID with flash cache
Power Management	Rack-level power capping and management via Extreme Cloud Administration Toolkit (xCAT)
Systems Management	Remote management using Lenovo XClarity Controller; 1Gb dedicated management NIC
OS Support	Red Hat Enterprise Linux 7.5; Visit lenovopress.com/osig for more information.
Limited Warranty	3-year customer replaceable unit and onsite limited warranty, next business day 9x5, service upgrades available

For More Information

To learn more about the ThinkSystem SR670, contact your Lenovo representative or Business Partner or visit lenovo.com/thinksystem. For detailed specifications, consult the SR670 Product Guide at lenovopress.com/lp1051.

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† ITIC Global Reliability Study, lenovopress.com/lp1117. ‡ TBR Customer Satisfaction Study, lenovopress.com/lp1118.